

Notice of Allowability

Application No.

09/988,039

Examiner

Tarifur R Chowdhury

Applicant(s)

KARASAWA ET AL.

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/29/03.
2. ☒ The allowed claim(s) is/are 3,5,6,9-12,16,17 and 20.
3. ☒ The drawings filed on 16 November 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No. _____.
- (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
- (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1 ☐ Notice of References Cited (PTO-892)
- 3 ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 5 ☐ Information Disclosure Statements (PTO-1449), Paper No. _____
- 7 ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 2 ☐ Notice of Informal Patent Application (PTO-152)
- 4 ☐ Interview Summary (PTO-413), Paper No. _____
- 6 ☐ Examiner's Amendment/Comment
- 8 ☒ Examiner's Statement of Reasons for Allowance
- 9 ☐ Other

Allowable Subject Matter

1. Claims 3, 5, 6, 9-12, 16, 17 and 20 are allowed.
2. The following is an examiner's statement of reasons for allowance:
3. As to claim 3, the prior arts of record do not anticipate or render obvious to one skilled in the art an electro-optical device comprising various elements as claimed, more specifically a vertically conducting pad disposed in the sealing region and an opposing electrode including a vertical conductor section which opposes the vertically conducting pad and wherein at least one part of the sealing material, which is disposed between the vertically conducting pad and the vertical conductor section, includes an electrically conductive material and the vertically conducting pad occupies at least one of three given sides of the sealing region and is formed at at least one of the four sides of the sealing region at which an inlet for the electro-optical substance is not formed.
4. As to claim 5, the prior arts of record do not anticipate or render obvious to one skilled in the art an electro-optical device comprising various elements as claimed, more specifically a vertically conducting pad disposed in the sealing region and an opposing electrode including a vertical conductor section which opposes the vertically conducting pad and wherein at least one part of the sealing material, which is disposed between the vertically conducting pad and the vertical conductor section, includes an electrically conductive material, wherein the sealing material includes a gap-forming member mixed therein and the gap-forming materials includes electrically conductive particles at least in a portion of the sealing material disposed between the vertically conducting pad and the vertical conductor section.

5. As to claim 9, the prior arts of record do not anticipate or render obvious to one skilled in the art an electro-optical device comprising various elements as claimed, more specifically a vertically conducting pad disposed in the sealing region and an opposing electrode including a vertical conductor section which opposes the vertically conducting pad and wherein at least one part of the sealing material, which is disposed between the vertically conducting pad and the vertical conductor section, includes an electrically conductive material, the sealing material includes the electrical conductive material at least in a portion of the sealing region opposing the vertically conducting pad and includes an electrically insulative material in the portion of the sealing region not opposing the vertically conducting pad.

6. As to claim 10, the prior arts of record do not anticipate or render obvious to one skilled in the art an electro-optical device comprising various elements as claimed, more specifically a vertically conducting pad disposed in the sealing region and an opposing electrode including a vertical conductor section which opposes the vertically conducting pad and wherein at least one part of the sealing material, which is disposed between the vertically conducting pad and the vertical conductor section, includes an electrically conductive material and a surface of the vertically conducting pad formed in the sealing region is disposed on the same plane as that of a surface of an insulation film formed in the sealing region.

7. As to claim 11, the prior arts of record do not anticipate or render obvious to one skilled in the art an electro-optical device comprising various elements as claimed, more specifically a vertically conducting pad disposed in the sealing region and an opposing

electrode including a vertical conductor section which opposes the vertically conducting pad and wherein at least one part of the sealing material, which is disposed between the vertically conducting pad and the vertical conductor section, includes an electrically conductive material, a surface of the vertically conducting pad formed in the sealing region is disposed at a level differing from the level of a surface of an insulation film formed in the sealing region, and the sealing material includes gap-forming members having diameters differing from each other in accordance with the size of a gap between the first substrate and the second substrate, the size of the gap varying between a portion of the sealing region in which the vertically conducting pad is formed and another portion of the sealing region in which the insulation film is formed so as to control the gap between the first substrate and the second substrate.

8. As to claims 16 and 17, the prior arts of record do not anticipate or render obvious to one skilled the art the method of fabricating an electro-optical device comprising various steps as claimed, more specifically the step of bonding with the sealing material comprises the steps of applying the sealing material including an electrically conductive gap-forming member to a portion of the sealing region opposing the vertically conducting pad by using a dispense, and applying the sealing material including an electrically insulative gap-forming member to another portion of the sealing region not opposing the vertically conducting pad by using another dispenser.

9. As to claim 20, the prior arts of record do not anticipate or render obvious to one skilled in the art an electro-optical device comprising various elements as claimed, more specifically a vertically conducting pad supplying an opposing-electrode potential-signal

to the opposing electrode, faced with at least one of three sides in which the region of the lead wires of the sealing region above the first substrate is not formed, a vertical conductor section opposing the vertically conducting pad above the second substrate, a conductive gap-forming member mixed into the sealing material that is disposed between the vertically conducting pad and the vertical conductor section and a non-conductive gap-forming member mixed into the sealing material in the region of the lead wires.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tarifur R Chowdhury whose telephone number is (703) 308-4115. The examiner can normally be reached on M-Th (6:30-5:00) Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (703) 305-3492. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

TRC
October 24, 2003



T. Chowdhury
Primary Examiner
Technology Center 2800